Edufun!" GOLF CLASSIC & COMPUBAR **Total Computation of the computa



Edufun!

A Division of Milliken Publishing Company

USER'S GUIDE

INTRODUCTION

EduFun!™...programs offering a unique combination of computer-generated learning and fun from a company with years of experience in educational publishing. Children (of all ages) explore and reinforce basic concepts through Milliken's MathFun!™ games which both teach and entertain.

Our primary objective is simple — make learning fun. EduFun! programs do just that!

THIS GUIDE CONTAINS . . .

simple directions for the MathFun! games, suggestions for the reusable cards, and ideas for follow-up activities for families. The suggestions extend the skills reinforced in the MathFun! games.

Whenever parents and children share the games, follow-up activities are a natural extension. Encourage your children to put these MathFun! skills to everyday use. Computer games can provide learning experiences. MathFun! games do. MathFun! games make learning fun!

MathFun! games developed by Dr. William H. Kraus.

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WHAT YOU'LL NEED . . .

For the cassette:

1 Atari® Computer (16K RAM)

1 Atari® Program Recorder

1 Atari® Basic Cartridge

For the diskette:

1 Atari® Computer with (32K RAM)

1 Atari® Disk Drive

1 Atari® Basic Cartridge

1 MathFun! Game, of course!

1 or more children of ANY age!

Atari® is a trademark of Atari Inc.

HOW TO GET STARTED . . . HOW TO STOP . . .

Your Atari computer comes with explicit instructions for setting up equipment. Follow the instructions carefully. Failure to heed manufacturer's instructions and warnings may result in damage to your computer.

When using the cassette . . .

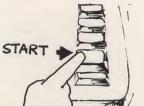
insert Basic Language Cartridge in computer.

DO NOT TURN ON YOUR COMPUTER, YET!

Choose the game you wish to play. With game choice in #1 position on label, place cassette in program recorder.
Rewind tape.

Hold down START button on computer and turn computer on. Release START button. Press PLAY on program recorder.





Press RETURN key on computer. Computer will load and run program. (Be patient . . . it will take time.) You're ready for MathFun! Follow computer directions.

When you're finished . . .

READY will appear on the screen, and you may turn off the computer and TV or monitor.

When using the diskette . . .

insert Basic Language Cartridge in left slot of computer. Turn on disk drive.

When BUSY LIGHT goes off, insert diskette, label side up, notch on left, until you hear click. Close disk drive door. Turn on computer. You're ready for MathFun! Follow computer directions.

When you're finished . . .

turn disk drive off. Turn computer off. Turn monitor off.

RECORD-KEEPING . . . For parents only!

MathFun! diskettes only include a record-keeping system called the Manager. This capability allows parents to review a youngster's progress, scores, number of games played, time spent playing a game, etc. As kids play the games, their scores are automatically recorded in the Manager.



To access the Manager, when the Menu page is displayed on the screen, press **0** (zero).

If games are heavily used, it is a good idea to review the Manager at least every two to three weeks. Reviewing the Manager condenses the user's files, and allows for additional records.

GOLF CLASSIC DIRECTIONS

- Angle and Length Estimation
- Geometric Skills Practice

Golf may be played by up to four people. After the first hole, the player with the lowest score on the previous hole goes first.

ANGLE When it is your turn, your golf ball will blink. The computer will ask, "What angle would you like to use?" Enter an angle between 0 and 360 degrees, and press the RETURN key. You may also enter negative angles, if necessary.

The diagram in the lower right corner of the screen will help you choose the correct angle. Pressing **H** will put a grid over your ball to further assist you.

NOTE: If you wish to change your angle, when the computer asks, "How many units long?," press **0** (zero) and the RETURN key. When the computer asks, "Do you want to quit?," press **N** and the RETURN key.

LENGTH After you have entered the angle you wish, the computer will ask, "How many units long?" Enter the length of your shot in units, and press the RETURN key. The length of one

unit is shown in the lower left corner of the screen. The unit length is different each time you play a round.

NOTE: You may enter your unit length using decimals as well as whole numbers.

PUTTS Once you land on the green, the computer will putt for you and will tell you how many putts you took. Of course, the closer you land to the hole, the fewer putts you will take.

A NOTE AND TWO WARNINGS!

When two or more play, each tee shot must be at least three degrees different from any other tee shot.

There is a one-stroke penalty for going out of bounds or into a water hazard.

When you are shooting from a sand trap, your ball may go at a different angle or distance than you choose.

GOOD SHOOTING AND GOOD LUCK!

REUSABLE GOLF SCORECARD

The golf scorecard has two primary uses:

- 1. To record strokes (shots) per hole and total score.
- 2. To provide a CODE to explain the symbols used in the game and the rules and penalties involved.

(Use a wax crayon or a water soluble marker. Wipe clean with a tissue.)





Keep angles and distances in mind. Plan imaginary trips.

Use maps and figure distances. Pick two places on the map and ask children to tell you distance between two points. Use map's scale of miles to figure distances. Would a road that angles be shorter?

Mentally project a circle of 360° over a section of a map. Working from a location in the center of the circle, name the places that are located at a 45° angle, a 180° angle, etc. Make a circle from cardboard and mark off major degrees and use to check child's answers.



Reinforce the angles playing pool with your children. Whenever possible, have them call their shots and the degrees of angles they will use.

Estimating is a skill used in everyday life. Encourage children to estimate how many steps from here to there, how many blocks to the store, how many miles have been driven, etc.





COMPUBAR DIRECTIONS

- Reading Graphs
- Constructing Arithmetic Expressions
- Mental Addition and Subtraction

Combine 3 or more bars from the blue bar graph to form a bar the same length as the green goal bar shown below the bar graph. You may use each blue bar only once.

Press + to add a bar. Press = to subtract a bar. Press S to stop when you have computed your answer. If the red bar you have made is the same length as the green goal bar, you win! Perfect scores earn fireworks when you stop.

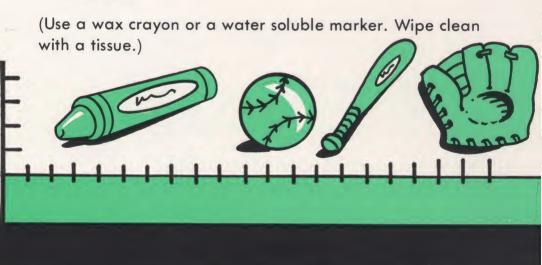
NOTE: There is always a solution possible. The bar graph you make may NOT be less than 0 nor more than 15 units long at any time.



REUSABLE COMPUBAR CARD

The Compubar Card has a variety of uses:

- 1. Use as a practice pad to help solve whatever goal bar is shown on the screen.
- 2. Shade in any length goal bar and bars in the graph. See if it is solvable.
- 3. Shade in any length goal bar and bars in the graph for another family member to solve.
- 4. Use the blank bar graph for your children to depict something of current interest to them, such as the scores of baseball teams in their league or the way they spend free time.



KEEP ON GRAPHING!

Using the directions for playing Compubar, give your children practice making up specific amounts of money using a specific number of bills/coins (units), or using the least number of units, e.g., \$1.35 (3 units: dollar bill, quarter, dime).

When taking a trip, encourage children to practice mental addition and subtraction by calling out "stringer problems", e.g., 1 + 3 - 2 + 5 - 1 + 6, etc. Keep stringing as long as children are correctly answering. Challenge your children to string as long a problem together as possible. Encourage older children to design graphic

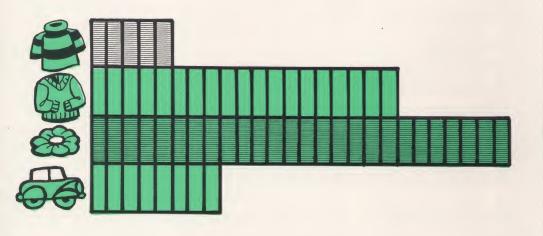
stringer problems for younger brothers and sisters.

Design a game board for your younger children that requires them to correctly add or subtract before moving ahead

aci before moving uneud.			
4+1	7-3	8+3	-2



Pick up on the idea of graphs and have your children graph how many sweaters of a specific style the family has, how many tulips, as compared to petunias, roses, marigolds, etc., in the flower bed, how many cars (specific makes) pass by your house in a given period of time. Children could graph number of people in family for themselves and several of their friends.



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